NCLE SAM is collecting defense dividends for 28 years of radio tolerance. His 55,000 radio amateurs, those civilian enthusiasts whose hobby is short wave "kaffee klatsching," are tipping him off about fifth columnists working on American airlanes.

In Wisconsin, Uncle Sam is hiring "hams" to listen in and tune over the bands, keeping a constant vigil of short wave radio heard in the United States. According to Louis Wollaeger, who operates W9ANA at his home, 1606 Martha Washington dr., a number of amateurs have been signed up by the government at \$135 a month—on a temporary basis—to police the air.

"Of course," Wollaeger says, "the government has frowned on self-appointed spy hunters, but I'm sure there isn't an amateur operator in Milwaukee who isn't on the alert for strange signals. Naturally, they would be reported immediately to the FBI."

That's the way every "ham" in the country feels about his government. It's his way of repaying the United States for a policy of encouraging the amateur operators instead of prohibiting or restricting—the policy followed in European countries, some of which no longer exist.

To date, according to the Associated Press, they have turned up nothing to compare with the pre-World-war service of Charles Apgar of Westfield, N. J., whose vigil at W2MN, his home station, led to confiscation of the Telefunken (German) transatlantic radio station at Sayville, Long Island, for non-neutral communication in 1915.

Three government censors vainly watched Sayville, suspected of handling illegal traffic to aid Germany in the war. W. J. Flynn, chief of the United States secret service, heard of Apgar's ingenious arrangement to record radio signals, and sought the amateur's aid.

In three nights, using Apgar's recordings to slow down Sayville's high speed signals so they could be read, government agents gained sufficient evidence to close the station for sending tips on neutral

'Hams' vs. Fifth Column

Uncle Sam Gets Dividends in Defense for His Fair Treatment of Amateur Stations

shipping to German U-boats, and to intern trucks will be added, to speed the discovits general manager and chief engineer.

ANTI-FIFTH-COLUMN activities of amateurs in the present crisis have consisted mainly of reports of "queer" code communications heard—remarks made by "mystery" stations recognized instantly as nonamateur in nature.

In one instance an amateur, well known for his skill at radio construction, received—and promptly reported to government agents—an order from a stranger he knew was not an amateur, to put together equipment for a powerful short wave station.

The results of these "tips" are hidden in files of the federal bureau of investigation—but in no case have radio amateurs been the culprits.

The government has been keeping careful watch of radio communication—as careful, that is, as is possible with limited personnel for the job. It maintains monitoring stations at Boston, Baltimore, Atlanta, San Pedro, Calif.; Portland, Ore.; Great Lakes, Ill., and Grand Island, Neb. At those places, with selective receivers, government operators "listen in" on broadcast and code stations, watching both for technical breaches of law and infractions of neutrality.

But this radio guard is being intensified today. President Roosevelt assigned to the federal communications commission, from the special \$50,000,000 fund allotted him by congress, \$1,600,000 for new equipment and personnel expansion.

The FCC has had 200 men in its field force—will have 500 to 600 when fully expanded. New "tracking" equipment in

ery of stations overheard in illegal communication. Plans for three new monitoring stations in Alaska and one in Hawaii, and for 100 smaller "listening posts" at 200 mile intervals across the nation have been revealed.

If your neighbor tinkers with amateur radio, he already has been "booked" and fingerprinted in a census of the nation's radio men.

He's had to furnish proof of his citizenship; been told he can't communicate any more with foreign amateurs; and turned in his answers to a questionnaire that covers, among other things, a statement of any present or past connection with aliens or foreign governments.

Only on Saturdays or Sundays, during daylight hours, can he broadcast from a car or other mobile unit, or from any field position—and then he must give 48 hours' notice to the radio inspector in Chicago. The amateur still can use the five meter band at any time for mobile or field broadcasts, but he doesn't because there are so few amateurs working this band.

The amateurs have not been singled out in the federal survey. Police radio operators, airways "ops" and commercial radiomen who work for the nation's broadcast and land or ship stations are included.

The purpose is twofold: (1) To furnish basic information in combating fifth columnists; (2) to take thorough inventory of the nation's radio operating talent.

MECHANIZED warfare puts a premium on radio communication. Maneuvering units of tanks, ships or airplanes must maintain contact with their bases

and with each other in warfare. Should war come to the United States, the army and navy radio services would have to be rapidly expanded. There must be no question of loyalty if these civilian radiomen are mobilized.

When the United States entered the World war 23 years ago, radio was young. There were perhaps 6,000 radio amateurs in the United States. When war came, the government promptly closed their stations.

The navy, finding its need for operators acute, appealed to the American Radio Relay league, national organization of amateurs, for 500 operators in 10 days—and got them. By the armistic some 4,000 amateurs were in military and naval service.

Radio has grown up since the war. Development of broadcasting has been paralleled by expansion in the commercial and amateur phases. The army and navy decided a dozen years ago to be ready for madio mobilization if war came again. Thousands of amateur and commercial operators have taken part in their voluntary training programs—carrying on radio drills "on the air" to become familiar with army and navy procedure. The navy has enlisted its civilian operators in the reserve, commissioned some as officers, and trained hundreds annually on shipboard each summer, with pay and allowances.

From this vast pool of government licensed operators, the armed services believe they can meet immediate mobilization needs while training new recruits.

Meantime the amateurs have been proving their peacetime value in emergency service so effective that through the ARRL and army and navy channels they are organized for active co-operation with the American Red Cross in storms and floods. Their short wave stations, in basements or attics, have kept numerous expeditions in tropical or polar areas in touch with the nation.

Many of these amateurs are youngsters, but the average age is 30 years, well within military limits. On the average they spend \$400 for equipment, with the average station power around 100 watts.